

IN THE CLAIMS:

1. (Currently amended) A data processing machine implemented method of selecting data sets for use with a predictive algorithm based on data network geographical information, comprising data processing machine implemented steps of:
 - generating a first distribution of a training data set;
 - generating a second distribution of a testing data set;
 - comparing the first distribution and the second distribution to identify a discrepancy between the first distribution and the second distribution with respect to data network geographical information; and
 - modifying selection of entries in one or more of the training data set and the testing data set based on the discrepancy between the first distribution and the second distribution.
2. (Original) The method of claim 1, wherein the first distribution and the second distribution are distributions of a number of data network links from a customer data network geographical location to a web site data network geographical location.
3. (Original) The method of claim 1, wherein the first distribution and the second distribution are distributions of a size of a click stream for arriving at a web site data network geographical location.
4. (Original) The method of claim 1, wherein comparing the first distribution and the second distribution includes comparing one or more of a mean, mode, and standard deviation of the first distribution to one or more of a mean, mode, and standard deviation of the second distribution.
5. (Original) The method of claim 1, wherein the first distribution and the second distribution are distributions of a weighted data network geographical distance between a customer data network geographical location and a web site data network geographical locations.

6. (Original) The method of claim 1, wherein the first distribution and the second distribution are distributions of a weighted click stream for arriving at a web site data network geographical locations.
7. (Original) The method of claim 1, wherein modifying selection of entries in one or more of the training data set and the testing data set includes generating recommendations for improving selection of entries in one or more of the training data set and the testing data set.
8. (Currently amended) The method of claim 1, wherein the training data set and the testing data set are selected from a customer information database comprising information with respect to customers who have purchased any of goods and services over a data network, wherein the data network geographic information pertains to geographic information of the data network.
9. (Currently amended) The method of claim 1, further comprising comparing at least one of the first distribution and the second distribution to a distribution of a customer database to determine if the training data set and the testing data set are geographically representative of a customer population represented by the customer database.
10. (Currently amended) The method of claim 1, wherein the first distribution and second distribution are frequency distributions of ~~one of~~ number of data network links between a customer geographical location and one or more web site data network geographical locations, and size of a click stream for arriving at one or more web site data network geographical locations.

11. (Original) The method of claim 9, wherein comparing at least one of the first distribution and the second distribution to a distribution of a customer database includes: generating a composite data set from the training data set and the testing data set; and generating a composite distribution from the composite data set.

12. (Currently amended) The method of claim 1, wherein modifying selection of entries in one or more of the training data set and the testing data set includes changing one of a random selection algorithm and a seed value for a the random selection algorithm.

13. (Original) The method of claim 1, further comprising training a predictive algorithm using at least one of the training data set and the testing data set if the discrepancy is within a predetermined tolerance.

14. (Original) The method of claim 13, wherein the predictive algorithm is a discovery based data mining algorithm.

15. (Currently amended) An apparatus for selecting data sets for use with a predictive algorithm based on data network geographical information, comprising: a statistical engine; and a comparison engine coupled to the statistical engine, wherein the statistical engine generates a first distribution of a training data set and a second distribution of a testing data set, the comparison engine compares the first distribution and the second distribution to identify a discrepancy between the first distribution and the second distribution with respect to data network geographical information, ~~and~~ modifies selection of entries in one or more of the training data set and the testing data set based on the discrepancy between the first distribution and the second distribution, and provides the modified selection of entries for use by the predictive algorithm.

16. (Original) The apparatus of claim 15, wherein the first distribution and the second distribution are distributions of a number of data network links from a customer data network geographical location to a web site data network geographical location.
17. (Original) The apparatus of claim 15, wherein the first distribution and the second distribution are distributions of a size of a click stream to arrive at a web site data network geographical location.
18. (Original) The apparatus of claim 15, wherein the comparison engine compares the first distribution and the second distribution by comparing one or more of a mean, mode, and standard deviation of the first distribution to one or more of a mean, mode, and standard deviation of the second distribution.
19. (Original) The apparatus of claim 15, wherein the first distribution and the second distribution are distributions of a weighted number of data network links between a customer data network geographical location and a web site data network geographical location.
20. (Original) The apparatus of claim 15, wherein the first distribution and the second distribution are distributions of a weighted size of a click stream to arrive at a web site data network geographical location.
21. (Original) The apparatus of claim 15, wherein the comparison engine modifies selection of entries in one or more of the training data set and the testing data set by generating recommendations for improving selection of entries in one or more of the training data set and the testing data set.
22. (Currently amended) The apparatus of claim 15, further comprising a training data set/testing data set selection device that selects the training data set and the testing data set from a customer information database comprising information with respect to customers who have purchased any of goods and services over a data network, wherein

the data network geographic information pertains to geographic information of the data network.

23. (Currently amended) The apparatus of claim 15, wherein the comparison engine further compares at least one of the first distribution and the second distribution to a distribution of a customer database to determine if the training data set and the testing data set are geographically representative of a customer population represented by the customer database.

24. (Currently amended) The apparatus of claim 15, wherein the first distribution and second distribution are frequency distributions of ~~one of~~ a number of data network links between a customer data network geographical location and one or more web site data network geographical locations, and a size of a click stream to arrive at one or more web site data network geographical locations.

25. (Original) The apparatus of claim 23, wherein the comparison engine compares at least one of the first distribution and the second distribution to a distribution of a customer database by:

generating a composite data set from the training data set and the testing data set;
and

generating a composite distribution from the composite data set.

26. (Currently amended) The apparatus of claim 15, wherein the comparison engine modifies selection of entries in one or more of the training data set and the testing data set by changing one of a random selection algorithm and a seed value for ~~a~~ the random selection algorithm.

27. (Original) The apparatus of claim 15, further comprising a predictive algorithm device, wherein the predictive algorithm device is trained using at least one of the training data set and the testing data set if the discrepancy is within a predetermined tolerance.

28. (Original) The apparatus of claim 27, wherein the predictive algorithm is a discovery based data mining algorithm.
29. (Currently amended) A computer program product in a computer readable medium comprising a data structure for enabling a data processing machine to selecting select data sets for use with a predictive algorithm based on data network geographical information, comprising:
- first instructions for generating a first distribution of a training data set;
 - second instructions for generating a second distribution of a testing data set;
 - third instructions for comparing the first distribution and the second distribution to identify a discrepancy between the first distribution and the second distribution with respect to data network geographical information; and
 - fourth instructions for modifying selection of entries in one or more of the training data set and the testing data set based on the discrepancy between the first distribution and the second distribution.
30. (Original) The computer program product of claim 29, wherein the first distribution and the second distribution are distributions of a number of data network links from a customer data network geographical location to a web site data network geographical location.
31. (Original) The computer program product of claim 29, wherein the first distribution and the second distribution are distributions of a size of a click stream to arrive at a web site data network geographical location.
32. (Original) The computer program product of claim 29, wherein the third instructions for comparing the first distribution and the second distribution include instructions for comparing one or more of a mean, mode, and standard deviation of the first distribution to one or more of a mean, mode, and standard deviation of the second distribution.

33. (Original) The computer program product of claim 29, wherein the first distribution and the second distribution are distributions of a weighted number of data network links between a customer data network geographical location and a web site data network geographical location.

34. (Original) The computer program product of claim 29, wherein the first distribution and the second distribution are distributions of a weighted size of a click stream to arrive at a web site data network geographical location.

35. (Original) The computer program product of claim 29, wherein the fourth instructions for modifying selection of entries in one or more of the training data set and the testing data set include instructions for generating recommendations for improving selection of entries in one or more of the training data set and the testing data set.

36. (Currently amended) The computer program product of claim 29, further comprising fifth instructions for comparing at least one of the first distribution and the second distribution to a distribution of a customer database to determine if the training data set and the testing data set are geographically representative of a customer population represented by the customer database.

37. (Currently amended) The computer program product of claim 29, wherein the first distribution and second distribution are frequency distributions of ~~one of~~ a number of data network links between a customer data network geographical location and one or more web site data network geographical locations, and a size of a click stream to arrive at one or more web site data network geographical locations.

38. (Currently amended) The ~~method~~ computer program product of claim 36, wherein the fifth instructions include:

instructions for generating a composite data set from the training data set and the testing data set; and

instructions for generating a composite distribution from the composite data set.

39. (Currently amended) The computer program product of claim 29, wherein the fourth instructions for modifying selection of entries in one or more of the training data set and the testing data set include instructions for changing one of a random selection algorithm and a seed value for a the random selection algorithm.

40. (Original) The computer program product of claim 29, further comprising fifth instructions for training a predictive algorithm using at least one of the training data set and the testing data set if the discrepancy is within a predetermined tolerance.

41. (Currently amended) A data processing machine implemented method of predicting customer behavior based on data network geographical influences, comprising data processing machine implemented steps of:

obtaining data network geographical information regarding a plurality of customers;

training a predictive algorithm using the data network geographical information; and

using the predictive algorithm to predict customer behavior based on the data network geographical information.

42. (Currently amended) An apparatus for predicting customer behavior based on data network geographical influences, comprising:

means for obtaining data network geographical information regarding a plurality of customers;

means for training a predictive algorithm using the data network geographical information; and

means for using the predictive algorithm to predict customer behavior based on the data network geographical information.

43. (Currently amended) A computer program product in a computer readable medium comprising a data structure for enabling a data processing machine to predicting predict customer behavior based on data network geographical influences, comprising:

first instructions for obtaining data network geographical information regarding a plurality of customers;

second instructions for training a predictive algorithm using the data network geographical information; and

third instructions for using the predictive algorithm to predict customer behavior based on the data network geographical information.